

REMARKS

Claims 1 - 9 and 30 - 49 are in the application and are presented for consideration.

Claims 1 - 4, 7 and 8 have been rejected as being anticipated by Schutt et al. (U.S. 5,611,635). The rejection is based on the consideration that Schutt et al. discloses a bearing shell which is a plastic molded part and has contact with an inner surface of a metal housing 1 as well as a lower end face of the metal housing 1. As such, this is considered contact with an inner surface and an outer surface of the metal housing 1. Applicant notes that Applicant has now clarified the claims with regard to the novel aspects of Applicant's invention which differ from the prior art as a whole including Schutt et al.

Applicant's representative wishes to thank Examiner Ferguson for the courtesy of a brief telephone discussion on April 15, 2006. During this time, Applicant's representative noted the position that the term edge was used in the manner similar to an edge of the table or other structure, namely a surface. The Examiner noted that the term could also be considered a line such as the line of the corner edge. As such, it was noted that different language could be used to highlight the important features of the invention. As can be appreciated, the preferred embodiment uses a shape metal tube for the housing part. This is more similar to sheet steel or sheet metal than the block 1 of the Schütt et al. reference. Of course even such a shape metal tube will have some lower end surface and upper end surface (which Applicant had referred to as an edge). Accordingly, the claims are now clarified to note the surface wherein the claimed molded material part at the outside surface is not at the bottom surface or top surface. Schütt et al. discloses an arrangement where a portion of the bearing shell part defines

a gap of the bottom surface of the block structure that comprises housing 1. The claims clearly highlight the important combination of features of the invention wherein the Schütt et al. reference clearly fails to teach or suggest the combination.

Schutt et al. discloses a ball joint comprising a housing 1 provided with an opening 1a and a Gudgeon 2 arranged in a ball socket 3 made of plastic. In the assembled condition, an annular shoulder 3c of the ball socket 3 adjoins the underside of the housing 1. The Schutt et al. reference fails to teach and fails to disclose the housing covered by molded material of the ball socket on its inner peripheral surface and on its outer peripheral surface. According to Schutt et al. only the inner peripheral surface and the lower front edge surface of the housing 1 are covered by the material of the ball socket 3.

Applicant has emphasized the novel and important characteristics of Applicant's invention claim 1 pointing out that the housing part has an outer peripheral surface at the outside of the housing part which extends from the top end surface (edge surface) to the pivot pin opening edge surface or bottom surface. The housing part has an inner peripheral surface at an inside extending from the top surface to the bottom surface. These surfaces not only have molded material on them but also the molded material define functional surfaces on an inside and an outside of the housing part. There is no suggestion in the Schutt et al. reference to provide molded material on the outer peripheral surface of the housing part, namely the surface which extends from the top end edge surface, namely adjacent to the top opening to the pivot pin edge surface, namely part of the housing which eventually is to the outside of the entire ball and socket joint construction. Applicant's invention provides significant advantages with regard

to manufacturing and provides the functional surface on the outside of the housing part, namely a groove for receiving a bellows seal element. Schutt et al. on the other hand discloses a bearing shell for the inside of the housing part which includes a flange extending downwardly with a part braced against the bottom edge of the housing part wherein the flange traps the bellows seal between itself and the bottom edge of the housing part. The difference is significant in practice and Schutt et al. does not suggest a molded part outer seat surface, on the outer surface of the housing part, as defined in the claim, and does not suggest how this can be provided and does not suggest any advantage to doing such. Schutt et al. relies on a trapping of the structure and does not suggest a bellows seat surface or other functional surface on the outside defined radially outwardly of the outer periphery of the housing. Accordingly, Applicant respectfully requests that the Examiner favorably consider amended claims 1 and claims depending thereon.

The Schutt et al. reference also fails to teach and fails to suggest a ball joint with molded material defining a groove with the housing edge or end surface engaged in a region of the molded material part having the groove. Specifically, with the invention, the groove portion or surface defined by the molded material (and defined by the support of the housing part) is such that the end or pivot pin opening edge surface of the housing part engages or is arranged in the groove region of this material. This can be appreciated for example from Fig. 13 which shows an outer groove surface or seat for a bellow seal which is in a region of the molded part with the edge surface or end surface of the housing part extending into it. Although the housing part or edge need not be fully covered with the material as in the embodiment of Fig. 13 the


groove structure with housing part edge inserted into the molded part region provides particular advantages as to support and robust functionality during use. This differs significantly from the Schutt et al. reference which relies on a simple trapping of the bellows end in a seat which is basically opposite to the bottom edge of the housing 1 (to form the trapping action). Although the wrapping or extension of the bearing shell of Schutt et al. over the bottom surface does provide some leverage support, Schutt et al. neither teaches nor suggests the combination of features of new claim 30 and instead directs the person of ordinary skill in the art toward a different construction and different concepts, namely the trapping concept leverage from the bottom edge. Applicant's structure uses the bottom edge surface or end surface of the housing extending into the region of the molded part which forms the groove, providing ease of manufacture as well as allowing a seat to be provided with good mechanical attributes. With the invention, the bellows seal is seated pressed radially inwardly, namely the material is built up off of the housing edge allowing a seat which has the strength of the housing part, the surface provided by the molded material with this being of a molded material part with functional portions on the outside and inside of the housing part.

New claim 41 is similar to revised claim 1 and further highlights that the molded material forms at least part of the bearing shell on the inside of the housing part and a groove on the outside of a housing part with the groove surface being defined by a bent or curved portion of the housing part cooperating with the molded material on the housing part outer surface. The material itself may define the basic contour of the curve but the curved or bent housing part provides functional and structural stability in providing the curve along the axial extent of the

groove. This structure is clearly neither taught nor suggested by Schutt et al. Claims 42 - 49 highlight further aspects of this combination.

Accordingly, it is Applicant's position that the claims define a combination of features which is neither taught nor suggested by the prior art. Reconsideration of the rejections in view of the new claims and revised claims and in view of the discussion above is requested.

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